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ABSTRACT

Compiled is a selected bibliography of social sciences in forestry, including economic, historic, sociological, and business aspects. Five major inclusive categories are the following: social science applied to forestry at large, applied to forestry's productive agents, applied to forest production, applied to manufacturing, and applied to marketing, trade, and demand for forest output. Arranged alphabetically by author, each entry contains the source of information, place and date of publication, volume number, and number of pages. A brief description of each resource is given. (RH)

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I SOCIAL SCIENCE APPLIED TO FORESTRY AT LARGE

A AMERICAN FORESTRY ASSOCIATION. Papers presented before the Sixth American Forest Congress. American Forests 82(3): 10-17, 61-65. Mar 1976; 82(4): 8-15, 60-67. Apr 1976.

Papers include: Meeting needs for water, forage and minerals (G. R. Bagley); Meeting recreational, park and wilderness needs (G. D. David); Meeting wildlife and fisheries needs (L. A. Greenwalt); Meeting timber production needs (C. W. Bingham). Resources for 300 million (C. J. Hitch); Research and education (E. E. Palmer); Worldwide perspective (K. F. S. King); Moving ahead together (R. C. Clusen).

A WESTOBY, JACK C. Making trees serve people. Commonwealth Forestry Rev. 54(3, 4): 206-215. Sep/Dec 1975.

Reminiscences and lessons from the author's 20-odd years with FAO. Scope and method of national forestry planning. Regional resource and requirements studies. Aid to developing nations; place of forestry in development. Exploitation of tropical forests; related industrial expansion. Failures of forestry aid programs for poor countries, such as to assist the common man, rehabilitate much devastated land, foster self-reliance. Chinese forestry as an example of a successful self-reliant program.

B1 FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS. Review of the world forestry situation. In Chinese, English, Spanish and French. FAO Conference, 18th Session, Rome. 7 pp. 1975.

World forestry situation. Forestry development, including pulp and paper industry, exports of tropical hardwoods, and harmonizing forestry with food production and rural development.

B2 BELTZ, ROY C. Alabama's timber resources updated, 1975. USDA Forest Serv. South. Forest Exp. Sta. Resource Bul. SO-55, 10 pp. 1975.

The 1975 softwood inventory is 11.9 billion cubic feet, up 6 percent from 1972. Hardwood inventory also rose 6 percent. Growth exceeds cut for the state, but some localities show declines in inventory.

B2 BELTZ, ROY C. Arkansas' timber resources updated, 1975. USDA Forest Serv. South. Forest Exp. Sta. Resource Bul. SO-56, 10 pp. 1975.

January 1975 growing stock is estimated to be 16.2 billion cubic feet, about 60 percent hardwood. Both softwood and hardwood stock increased at an average rate of 1 percent per year since 1968.

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B2 BEUTER, JOHN H., K. NORMAN JOHNSON, and H. LYNN SCHEURMAN. Timber for Oregon's tomorrow--an analysis of reasonably possible occurrences. Forest Res. Lab., School of Forestry, Oregon State Univ. Res. Bul. 19, 111 pp. Jan 1976.

From current timber inventory and information on timber management practices and growth, this model simulates the effects of alternative courses of action as a guide to policy making. Sample projections are displayed, and their contributions to the economies of areas within Oregon are analyzed.

B2 DWYER, JOHN F. Forestry issues in an urban economy. Jour. of Forestry 74(1): 21-23, 38. Jan 1976.

Issues generated by the changing social significance of forest resources in an urban economy, the state of New York. The state's forestry issues are described in order to bring them to the attention of decision-makers, researchers, and educators, who can help develop solutions.

B2 KNIGHT, HERBERT A., and JOE P. MC CLURE. North Carolina's timber, 1974. USDA Forest Serv. Southeastern Forest Exp. Sta. Resource Bul. SE-33, 52 pp. 1975.

The fourth statewide evaluation of North Carolina's timber reveals a decline in forest acreage but an increase in timber quantity. Between 1964 and 1974, inventory increased 19 percent; a 3-percent reduction in the quantity of softwood in the northern coastal plain was the most significant exception to the trend. Statewide, hardwoods account for almost two-thirds of the timber increase and, for the first time, hardwood growth exceeds that of softwood. Heavy utilization of pine and failures to regenerate pine after harvests have reinforced the strong drift toward hardwood.

B2 KNIGHT, HERBERT A. North Carolina's timberland acreage is declining. USDA Forest Serv. Southeastern Forest Exp. Sta. Res. Note SE-231, 5 pp. Dec 1975.

Renewed agricultural activity, continued urban encroachment, and other forest withdrawals have reversed the long upward trend in commercial forest acreage in North Carolina. Cropland retirement and its reversion to forest continues, but at a much slower rate. This source of new forest acres can no longer replenish the acres diverted to other uses.

B2 MITCHELL, ADAIR. Summary of information on lumber and wood products. U.S. Dept. of Commerce, Domestic and International Business Administration. 17 pp. Jul 1974.

Primer on timber resources, timber and tree products, and their output and foreign trade, United States.

I SOCIAL SCIENCE APPLIED TO FORESTRY AT LARGE

B2 MURPHY, PAUL, and ED KERR. Latest Louisiana survey shows healthy progress. Forest Farmer 35(5): 12, 14. Mar 1976.

Survey results show an increase in softwood consumption due mainly to rising production of pulp and paper mills. However, the state is growing one-third more timber than it is cutting. The hardwood resource is down, which requires serious attention. Suggestions for future management.

B3 ERASLAN, I. The history and new directions of forest management in Turkey. In Turkish; German sum. Istanbul Universitesi Orman Fakultesi Dergisi, A 23(2): 1-26. 1974.

Summary of history of planned forest management and changes in policy since 1857; details of the new policy introduced in 1973.

B3 ISHIKAWA, H. Development of forestry and forest industry in the last 10 years and its effect on the future of forest administration. In Japanese. Ringyo Gijitsu 12: 1-5. Dec 1974.

B3 LINNARD, W. Forests and forestry in the ancient Welsh laws. Quart. Jour. of Forestry 70(1): 38-43. Jan 1976.

The Welsh laws are a source of information on life in Wales before the Norman Conquest. They tell us about forests and their utilization in this period, especially forest ownership and rights, forest officials, and the tree species, their values and uses.

B3 WESTOBY, J. Forestry in China. In English, Spanish and French. Unasylva 27(108): 20-28. 1975.

Forest management, forest production, afforestation, and forest services in the People's Republic of China.

B5 ADEYOJU, S. K. Forestry and the Nigerian economy. Ibadan Univ. Press. 308 pp. 1975.

A study of the history, status, and potentialities of the Nigerian forestry sector. Forest resources, policy and administration, management, markets and marketing, wood-based industries, minor products, social benefits, financial costs and revenues, and policy issues--all primarily from the national and regional viewpoints.

B5 BOROTA, J. Forests and forestry in the Congo People's Republic. In Slovak. Lesnicky Casopis 20(1): 67-75. 1974.

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B5 FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, Forestry Dept. Forestry development, Gabon: Final report by the Technical Tropical Forestry Center. In French. FAO/UNDP Rep. 53 pp. 1974.

Forest inventory and utilization, transportation, forest management, forestry economics, recommendations.

C1 BENEDETTI, E. Forest policy principles and regulations and economic plans for forests. In Italian; Eng. sum. Monti e Boschi 25(5): 45-50. Sep/Oct 1974.

C1 FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, Forest Resources Division. Report on the second FAO/SIDA training course on forest inventory, Ibadan, Nigeria, August 12-September 13, 1974. 296 pp. 1975.

Includes: Forest inventories in economic planning (S. L. Pringle, pp. 135-136).

C1 WETTON, F. Balancing economic and social demands in a forestry program. Proc., 65th Western Forestry Conference. Pp. 50-53. 1975.

C2 APPLEGATE, RICK. Citizen participation in environmental decisions: unresolved difficulties and new directions. Western Wildlands 2(2): 27-33. Spring 1975.

Ennumerates the difficulties and the new opportunities for fundamental change in the practice of citizen participation.

C2 BARLOW, THOMAS, and JOHN FRANKLIN HALL. NRDC vs. NFPA: two views on the Monongahela. Jour. of Forestry 74(2): 87-89. Feb 1976.

Remarks by Barlow (forestry counsel, Natural Resources Defense Council) and Hall (vice president for forestry affairs, National Forest Products Association) concerning the Monongahela decision were presented at the October 21, 1975, Society of American Foresters, Washington, DC, Section meeting.

C2 BARLOW, THOMAS. What do they want? American Forests 82(4): 4, 48. Apr 1976.

Some themes which have been voiced publicly by persons whose activities have been influenced by the Monongahela decision.

C2 BETHEA, JOHN M. What's ahead in state regulation and control. Forest Farmer 35(2): 15, 30, 32. Nov/Dec 1975.

Potential administrative and legislative activity in southern states, with Florida as an example.

I SOCIAL SCIENCE APPLIED TO FORESTRY AT LARGE

C2 BRIZEE, CLARENCE W. Institutional and legal factors affecting renewable resources: the legal framework--trends in statutes and the courts. Jour. of Forestry 74(3): 141-145. Mar 1976.

A "quiet" revolution is taking place, affecting virtually the entire government. Every level is faced with problems in the use of our land and natural resources. The basic conflict is between the right of private property and the broader interest of the public in a quality environment.

C2 BROOKS, GEORGE N., and DUANE L. GREEN. 1976 forestry incentives program. Forest Farmer 35(5): 11, 15-16. Mar 1976.

Although federal funds are now available, the battle for future appropriations will continue.

C2 CORVANICH, A. The roles of the forest industry organization in implementing government forestry policy. Food and Agriculture Organization of the United Nations. FAO/DANIDA Training Course on Forest Seed Collection and Handing, Chiang Mai, Thailand, February 1975. Pp. 22-25. 1975.

Thailand.

C2 COVIN, R. Forest incentive in Alabama and Virginia. Tech. Pap., American Pulpwood Assoc. Pp. 59-62. May 1975.

C2 ENGS, WILLIAM D. Improving the performance of citizens' committees. Jour. of Forestry 74(1): 18-20. Jan 1976.

By focusing on group processes as well as the task to be accomplished, resource managers can improve the results from citizens' committees appointed to participate in land-use planning. Behavioral concepts can be applied to facilitate group development, manage conflict, and provide leadership.

C2 GRAU, FERNANDEZ S. Inventory and improvement of forest resources, Dominican Republic: Forest policy and legislation. In Spanish. Food and Agriculture Organization of the United Nations, Forestry Dept. Tech. Rep. 6, 90 pp. 1974.

Revision of draft legislation covering government monopoly of trade in wood and public enterprises in forestry sector.

C2 HAMILTON, H. Two years of forest policy--bedlam or short cut to sudden clarity. Skogen 62(7): 318-319. 1975.

Conflicting proposals for Swedish forest policy of two government committees that reported in March 1973 and February 1975; reactions of the forest industry to these proposals.

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C2 HUMPHREY, HUBERT H. In the courts, or in the woods? American Forests 82(1): 14-15, 62. Jan 1976.

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C2 HUTCHERSON, KATE. Endangered species: the law and the land. Jour. of Forestry 74(1): 31-34. Jan 1976.

Unclear and complicated sections of the Endangered Species Act of 1973; what the Act will mean for foresters.

C2 INSTITUTE OF FORESTERS OF AUSTRALIA, INC. Statement of national forest policy. Australian Forestry 38(2): 77. Sep 1975.

C2 MC GRATH, JOSEPH B. What's ahead in regulation and control at the national level. Forest Farmer 35(2): 16-17, 28, 32. Nov-Dec 1975.

National forest timber sales, water quality controls, and housing needs lead the list of issues.

C2 MELE, A. The forest problem in Sardinia: a contribution to planning a general program. In Italian; Eng. sum. Monti e Boschi 26(2): 18-28. 1975.

Past attempts to devise a plan for rational management of Sardinian forests; long-term forecasts regarding the possibility of raising the island's forest cover from 14 percent to 25 percent of total land area.

C2 NELSON, THOMAS C. The Monongahela decision. American Forests 82(1): 4, 55-56, 58. Jan 1976.

Court's decision is seen as divided into 3 parts: (1) that only dead, physiologically mature, or large trees can be sold, which precludes use of professionally accepted silvicultural systems for high-level, sustained yields of timber; (2) that timber to be sold must be both marked and designated, a practice that hampers efficiency; and (3) that each tree sold must be cut and removed.

C2 STANKEY, GEORGE H., JOHN C. HENDEE, and ROGER N. CLARK. Applied social research can improve public participation in resource decision making. Rural Sociology 40(1): 67-74. Spring 1975.

Questions for social research that might yield new knowledge about public participation.

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C2 USDA FOREST SERVICE. (1) A summary of a renewable resource assessment and a recommended renewable resource program; (2) The nation's renewable resources, an assessment, 1975; (3) A recommended renewable resource program--all as required by the Forest and Rangeland Renewable Resources Planning Act of 1974. USDA Forest Serv. (1) 29 pp.; (2) 345 pp.; (3) 658 pp. + Appendices. Feb 1976.

Final editions of documents recognized in draft form in No. 39, Feb 1976, page 17.

C3 RENFRO, J. Industry assistance to the private forest landowners in the Southwest. Tech. Pap., American Pulpwood Assoc. Pp. 56-59. May 1975.

D1b FORESTS AND PEOPLE. Use-value assessment of forest land. Forests and People 26(1): 10-15. 1976.

Tax principles in Louisiana's new state constitution (present-use, or preferential, assessment): their enactment and effect upon Louisiana's forest landowners.

D1b STEIMEL, ED. Facing the hard decisions. Forests and People 26(1): 16-18. 1976.

Tax proposal in Louisiana's new state constitution (present-use assessment) is biased against business and industry. The consumer will ultimately bear the burden of increased taxes in the form of increased prices.

D1c CONDRELL, WILLIAM K. Trends in timber taxation. Forest Farmer 35(2): 10-11, 40. Nov/Dec 1975.

Congressional review of timber taxation: impact of timber capital gains, significance of estate taxes, justification of timber capital gains.

D1c ORDE-POWLETT, P. C. The effect of capital transfer tax on woodlands. Quart. Jour. of Forestry 70(1): 33-38. Jan 1976.

Lack of confidence in forest investment stems more from the capital transfer tax legislation as originally drafted than from its final form which is now law. Private woodland owners can cope with the t[illegible] within the financial planning of forest estates, so as to create more employment opportunity.

D1c SUNLEY, EMIL M., JR. Capital gains treatment of timber: present law and proposed changes. Jour. of Forestry 74(2): 75-78. Feb 1976.

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The value of the special tax treatment of timber has never been substantiated, and current arguments for it are very weak. Tax treatment of timber should be subject to the same kind of analysis of its effectiveness and usefulness as are other aspects of public resource and environmental policy.

D2 IL'EV, L. I. Theoretical principles of the economic evaluation of forest land in cases of expropriation. In Russian. Lesnoi Zhurnal 17(6): 142-146. 1974.

Principles appropriate to Soviet economics. Expropriation for building as an example.

D2 KROTH, W. The rate of interest in forest valuation. In German; Eng. sum. Forstwissen Centralblatt 94(2/3): 54-66. Jun 1975.

D2 PABST, H. Estimating the value of non-market forest resources. In German. Forst- und Holzwirt 30(2): 25-28. 1975.

Review of literature on value of recreation, control of noise, soil stabilization, etc. and the costs to forest owners, with special reference to forests near large population centers.

D2 STREYFFERT, T. Forest valuation under reconsideration. In Swedish; Eng. sum. Sveriges Skogsvardsforbunds Tidskrift 73(1): 47-86. 1975.

A simplified method for calculating the capital value of a forest managed for sustained yield of timber.

D4 GRUENFELD, JAY. Optimal use of forest resources for people. Jour. of Forestry 74(3): 151-154. Mar 1976.

Human relations problems are generally more important than tree problems when one is striving to obtain optimal utilization of forest resources: Optimization should be a "people concept." Some opinions on future use of forest resources and what it will take to come closer to optimal use.

D6 SINGH, BAKHSHISH. Role of forestry in mitigating the energy crisis in India. English, German, and French summaries. The Indian Forester 101(10): 589-596. Oct 1975.

The desirable approach to the energy crisis is to rely more upon renewable resources and to conserve stored resources of non-renewable fossil fuels. Intensive management of fuelwood resources is needed.

D6 TSYMEK, A. A. Taking account of the time factor in forestry. In Russian. Lesnoe Khozyaistvo No. 1, pp. 11-15. 1975.

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A review of the effect of time in forestry in a planned economy, with special reference to the theories of Soviet economists from Marx to P. V. Vasiliev.

E LOIBERG, M., and A. A. MOSKALENKO. Some trends in sociological research in the forest industries of Russia. In Russian. Lesnaya Promyshlennost 3: 25-26. Mar 1975.

F CHAISISIND, KHACHEN. What do we get from forest-resources training for young people? In Thai. The Vanasarn 33(4): 373-375. Oct/Dec 1975.

F CHEIT, EARL F. The useful arts and the liberal tradition. McGraw-Hill Book Company. 165 pp. 1975.

Last in a series of fifteen profiles sponsored by The Carnegie Commission on Higher Education concerning history and problems of professional education, with special attention to the issue between "useful" and "liberal" education. A liberal education can be provided in professional curricula by teaching specialized subjects in a liberal manner. Chapter 6 concerns forestry.

F FOREST PRODUCTS JOURNAL. Fourteenth annual graduating student directory. Forest Products Jour. 26(3): 11-18. Mar 1976.

Names and brief summaries of the academic and work records of 138 students from 29 institutions in the U.S. and Canada who are seeking positions in the wood products field.

F GOZDARSKI VESTNIK. Special number on forestry education and training in Slovenia. In Slovenian; English and German summaries. Gozdarski Vestnik 33(4): 171-226. 1975.

A collection of 8 papers describing forestry education and training at various levels in Slovenia: education in university, training of private forest owners, on-job training of forest workers, training of technical staff, education of the general public, etc.

F HUGGARD, E. R. The employment of forestry graduates. Quart. Jour. of Forestry 70(1): 28-32. Jan 1976.

Survey of employment of forestry graduates from the four British schools. Employment figures, career trends. Results of a survey of job satisfaction.

F ILIEW, A., and W. GULEFF. Education and qualification of the coming generation for forestry in the People's Republic of Bulgaria. In German. Sozialistische Forstwirtschaft 25(2): 59-61. Feb 1975.

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F OPPER, M. A. Students learn the basics in forest conservation. Pulp and Pap. Mag. of Canada 76(11): 43-45. Nov 1975.

In a course offered by American Can Company as part of its public relations program, high school students see the results of multiple forest use.

F PYMAN, A. G. The need for continuing education in forestry. In English, Spanish, and French. Unasylva 24(108): 29-31. 1975.

Continuing forestry training and education for foresters in forest management techniques.

F ROCHE, LAURENCE. The new look of African education. Unasylva 27(109): 29-33. 1975.

Forestry education curricula in African universities are being dictated by Africa's own social and ecological needs and realities.

F SCANDINAVIAN FOREST ECONOMICS. Distribution supplement No. 1. Published in Finland for the Nordic Forest Economics Seminar by Postipankki. 24 pp. Autumn 1975.

Worldwide mailing list for Scandinavian Forest Economics, useful as a partial checklist of workers in the economics of forestry.

F SIMON, W. Ecology in the education and continuing training of modern foresters. In German. Deutsche Forstmann 14(9): 6. 1974.

F THEOE, DONALD R. Employment of 1975 forestry graduates. Jour. of Forestry 74(3): 165-168. Mar 1976.

F WETTON, FRANK, MARIE RAUTER, and LISE ROBITAILLE. Canadian women in forestry. In English and French. The Forestry Chron. 51(6): 225-229. Dec 1975.

History and prospects of employment of women in Canadian forestry.

G BOIS HEBDO. Wood and reconstruction in Vietnam. In French. Bois Hebdo 81(20): 11-12. 1975.

Forest resources of Vietnam, especially South Vietnam, where the area of high forest is about 760,000 hectares, vs. 1,678,000 hectares in North Vietnam. Role that forestry and forest industries can play in the economic reconstruction of the country, with particular reference to the opportunities for French technical assistance.

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G COLE, ALEXANDER B. Forest products industries and the North Carolina economy. Dissertation, Ph.D. Duke Univ. 239 pp. 1975.

A method for evaluating the impact of alternative investments in a regional economy on income, employment, and the forest resource.

H INFORMATION CANADA. Mackenzie Valley pipeline assessment: Environmental and socio-economic effects of the proposed Canadian Arctic Gas Pipeline on the Northwest Territories and Yukon. Information Canada, Ottawa. 442 pp. 1974.

Environmental aspects of the pipeline project, including questions of erosion, clearance and restoration of vegetation, wildlife conservation, and fire prevention and control; Chapter 4, section 7 is specifically concerned with forestry.

H SESCO, JERRY A. The forest products industry and the environment: a selected bibliography. USDA Forest Serv. North Central Forest Exp. Sta. Gen. Tech. Rep. NC-18, 23 pp. 1975.

495 literature citations that deal with the environmental and pollution aspects of timber production, processing, and utilization; general relations between forests and the environment.

H SZONYI, L. The role of forestry in the environmental protection of the world. In Hungarian. Erdo 24(3): 117-122. Mar 1975.

II APPLIED TO FORESTRY'S PRODUCTIVE AGENTS

A1 GRAMMEL, R. Planning for labor, a social and economic necessity; the situation in the state forests of Baden-Wurttemberg. In German. Allgemeine Forstzeitschrift 30(14): 283, 290. 1975.

Trends in labor requirements for the forests as a whole; trends for wood production and for services in connection with recreation and protection; changes in the relative requirements for different grades of staff and workers; increase in unproductive hours that have to be paid for; etc.

A1 PORTERFIELD, RICHARD L. A profile of forestry employment in Montana. USDA Forest Serv. Intermountain Forest and Range Exp. Sta. Res. Pap. INT-172, 24 pp. 1975.

Forestry employment (safety, capital investment, formal education levels, and productivity) in Montana compared with employment in other industries within the state and with employment in the forest products industry nationally.

A1 STUDITSKII, A. A., and G. M. KISELEV. Increasing the level of the organization of labor in forestry. In Russian. Lesnoe Khoziaistvo 4: 19-23. Apr 1975.

A3 NEEL, C. WARREN. Labor improvement phenomenon in furniture manufacturing. Forest Products Jour. 26(2): 23-25. Feb 1976.

The improvement phenomenon has been used in numerous industries by managers to utilize labor and materials more effectively, increase the accuracy of cost estimates, and evaluate manufacturing policy.

A3 STOCK, SARI. Industrial relations--old hands offer little hope. Pulp and Pap. Mag. of Canada 76(12): 95-98. Dec 1975.

Industrial Relations Section speakers at the Canadian Pulp and Paper Association meeting see increased productivity as the only cure for the ravages of strikes and inflation.

B1 BALAZS, I. Experiences in cooperative forestry. In Hungarian. Erdo 24(4): 166-168. Apr 1975.

B1 FOREST INDUSTRIES. Assorted public, private ownerships work together in resource program. Forest Industries 103(1): 52-53. Jan 1976.

Timber, game, cattle, and recreation production increased through cooperative management plan.

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B1 SAMAPUDDHI, K. Thailand's forest villages. Unasylva 27(107): 20-23. 1975.

Forest-village system, developed by Thailand's Forest Industry organization to provide labor for their long-term needs and, at the same time, permit the people to follow their traditional farming practices and induce shifting cultivators to settle down.

B2a PATRASCOIU, N. The management of forests used by the public. In Rumanian; English and French summaries. Radactia Revistelor Agricole, Bucharest, Rumania. 140 pp. 1974.

A classification of forests whose primary function is social; management of each type, with special reference to Rumania.

B2a PETERSON, RUSSELL W. Let's not gamble with our public forests. American Forests 82(1): 6, 49-52. Jan 1976.

Supports a policy of long-term conservation, managing the public lands for greater productivity without squandering them.

B2a VELAY, LOUIS H. Designing forest services to suit the country. Unasylva 27(109): 17-23. 1975.

Developing nations that based their forest services upon European models must reassess what they have and what their forestry and development needs are. Analysis of the problem; solutions.

B2b CLAWSON, MARION. The national forests. Science Vol. 191, pp. 762-767. Feb 1976.

U.S. national forests are a huge enterprise, with assets of $42 billion and annual cash revenue approaching $500 million. They are capital intensive, but the capital is used wastefully. Funds are spent in economically unrewarding regions, forests, and sites. Usefulness to Americans is far less than potential. A principal difficulty is dispersion of management responsibility--among Forest Service, Secretary of Agriculture, Office of Management and Budget, the Congress, and others. Major reforms are needed.

B2b TURNER, J. M. Allocation of forest management practices on public lands. Annals of Regional Science 8(2): 72-88. 1974.

A procedure for integrating product yields, costs, and values, into a planning system, and an allocational model that satisfies objectives of multiple-use planning in U.S. national forests.

B3a CORVANICH, AMNUAY. Cooperative forests in Sweden. In Thai. The Vanasarn 33(3): 283-288. Jul/Sep 1975.

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B3a EKLÖF, CHRISTER. Guatemala tries forest owner ideas. World Wood 17(2): 19. Feb 1976.

Swedish concept of forest owner associations is being adopted by native Indians of Guatemala, who collectively own rich forest lands.

B3a GOUTTIN, P. The purposes and role of a forestry group. In French. Foret Privee Francaise No. 101, pp. 65-67. 1974.

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B3a HANEY, HARRY L., JR. The effects of landowner characteristics on forest management decisions with reference to property taxation. Dissertation, Ph.D. Yale Univ. 1975.

A case study to provide better understanding of the relationship between landowner characteristics and forest management decisions. Particular attention is devoted to the role of property tax in the complicated set of circumstances governing forest land use. Gerogia coastal plain.

B3a KASAHARA, Y. Study of forest owners' cooperatives in Japan. In Japanese; Eng. sum. Bul. Kyushu Univ. of Forestry No. 49, 106 pp. Mar 1975.

B3a KINGSLEY, NEAL P. The forest-land owners of New Jersey. USDA Forest Serv. Northeastern Forest Exp. Sta. Resource Bul. NE-39, 24 pp. 1975.

Statistical-analytical report on a mail canvass of the private owners of commercial forest land in New Jersey. Includes trends in forest-land ownership, attitudes and intentions of owners, reasons for owning forest land, timber management, timber harvesting, recreation use.

B3a PIHA, A. On the creation of the Act on Forest Owners' Associations. In Finnish; Eng. sum. Silva Fennica 9(1): 49-73. 1975.

B3b MERRYMAN, S. G. A corporate approach to resource management. Western Wildlands 2(2): 5-11. Spring 1975.

Managers of the largest private forest-land holding in Montana are said to be meeting successfully the challenge of today's social, economic, and environmental concerns.

II APPLIED TO FORESTRY'S PRODUCTIVE AGENTS

B3c HOLMES, W. D., and C. J. INGLIS. Survey of private forestry costs in Scotland, Twenty-second annual report for forest year 1973. Dept. of Forestry, University of Aberdeen. 48 pp. + Appendices. Aug 1975.

Sample of 44 estates containing 22,658 hectares of forest.

B3c ROUTLEDGE, HOLLIS. Private forest lands in Nova Scotia--jigsaw puzzle-solver needed. Pulp and Pap. Mag. of Canada 76 (10): 33-35. Oct 1975.

The government and Nova Scotia forest industries help private woodlot owners manage their forests.

C1 SCHALLAU, CON H. Land for growing tomorrow's timber--some short-term imperatives. In Perspectives on Prime Lands, U.S. Dept. of Agriculture. 4 pp. typescript. 1975.

A critique of a paper by John Zivnuska and Henry Vaux, entitled, "Future needs for land to produce timber," prepared for the USDA Prime Land Seminar held at Airlie House, Warrenton, Virginia, July 16-17, 1975, also published in Perspectives on Prime Lands.

C3 FIELD, RICHARD C., and FRANK J. CONVERY. Estimating local economic impacts in land-use planning. Jour. of Forestry 74(3): 155-156. Mar 1976.

A new computer program, BENEFIT, incorporates the essentials of an export-base model to enable land-use planners to estimate some of the local economic impacts of alternative plans for the purpose of ranking those alternatives.

C3 IRLAND, L. C. Howling in the wilderness: politics of forest land use in an environmental age. Connecticut Woodlands 39(4): 11-16. Winter 1974/75.

C3 KUNKLE, S. H., and G. CHILD. Evaluation and planning for wildlands and forestry. Adhoc Expert Consultation on Land Evaluation--Rome, Italy. Food and Agriculture Organization of the United Nations. World Soil Resources Reports No. 45, pp. 119-126. Jan 1975.

Objectives of land-use planning in forestry planning and evaluation; land-system approach in wildland classification.

C3 LANDOLT, E. Role of individual landscape elements in the economy of the landscape. In German. In Landschaftsschutz und Umweltpflege. Verlag Huber and Company, Frauenfeld, Switzerland. Pp. 40-53. 1974.

II APPLIED TO FORESTRY'S PRODUCTIVE AGENTS

Types of environmental influence of forests of human activities; combined influences; stability of various types of ecosystem; conclusions about land-use planning.

C3 MILLER, ROBERT W. A model to explain trends in rural land values in central Massachusetts: 1952-1971. Dissertation, Ph.D. Univ. of Massachusetts. 106 pp. 1975.

Compares trends in land values in central Massachusetts with discounted forest land values in order to ascertain the financial feasibility of timber production.

C3 STOCKER, G. C., and D. A. GILMOUR. Environmental and social influences affecting land-use planning in the forested areas of far North Queensland. Australian Forestry 37(3): 225-232. Mar 1975.

C3 WAGAR, J. ALAN. Land-use planning: a view from Holland. Jour. of Forestry 74(1): 13-17. Jan 1976.

Participation in a Dutch planning study suggested that public resource decisions require input from at least 5 groups: diverse specialists, interest groups, analysts, plan builders, and decision makers. Integrating these inputs requires emphasizing meanings rather than details, careful distinctions between facts and values, and a defensible hierarchy of values.

D1 GOFORTH, MARCUS H., and THOMAS J. MILLS. Discounting perpetually recurring payments under conditions of compounded relative value increases. USDA Forest Serv. Res. Note WO-10, 3 pp. Dec 1975.

Capitalization formulas.

III APPLIED TO FOREST PRODUCTION

A1 ACAR, WILLIAM, and RICHARD P. SMITH. An aggregation method of setting cost-efficient targets for timber production and recreation opportunities on forested land. In English; French sum. Canadian Jour. of Forest Res. 5(4): 562-573. Dec 1975.

Method for multiple-use planning of public land outside parks for the production of timber and recreation opportunities. Guides to administration and budgeting.

A1 ATTIWILL, PETER. The eucalypt forest--resources, refuges, and research. Australian Forestry 38(3): 162-170. Dec 1975.

Ecological knowledge of eucalypt forests is limited, and consequently we cannot assert that timber management is wholly compatible with other forest uses. More research by specialists from a range of disciplines is needed.

A1 BURKE, RICHARD E. National forest visual management--a blend of landscape and timber management. Jour. of Forestry 73(12): 767-770. Dec 1975.

The needs of silviculture, transportation planning, and visual design are all basic components of national forest timber-sale preparation.

A1 CLARY, WARREN P., WILLIAM H. KRUSE, and FREDERIC R. LARSON. Cattle grazing and wood production with different basal areas of ponderosa pine. Jour. of Range Management 28(6): 434-437. Nov 1975.

Ponderosa pine stands were thinned to various basal areas on the Wild Bill Range near Flagstaff, Arizona, to determine the effects on beef and wood production.

A1 FERGUSON, I. S., and J. J. REILLY. The economics of modifying eucalypt forests. 38(2): 134-143. Sep 1975.

The multiple demands made by society upon these forests are increasing and changing in emphasis. Choice among alternative forms of modification and use of these forests must aim to provide the greatest net benefit to society. Hence, economic evaluation is needed.

A1 SEIBERT, P. A synoptic multiple-use system of evaluating ecosystems and landscape units. In German; Eng. sum. Forstarchiv 46(5): 89-97. 1975.

A method for comprehensive evaluation of forest regions or landscapes, to judge their suitability for major uses such as timber growing, watershed protection, and recreation.

III APPLIED TO FOREST PRODUCTION

A3 STERNITZKE, HERBERT S., and HENRY A. PEARSON. Forest-range resources of southwest Louisiana. Jour. of Range Management 28(4): 264-266. Jul 1975.

Findings of the first forest-range inventory of southwest Louisiana conducted as part of the nationwide Forest Survey are described and evaluated.

A4 HUYLER, NEIL K. Tubing vs. buckets: a cost comparison. USDA Forest Serv. Northeastern Forest Exp. Sta. Res. Note NE-216, 5 pp. 1975.

For collecting maple sap, plastic tubing with vacuum pumping costs less than using buckets.

A5a EISENHOWER CONSORTIUM. Man, leisure, and wildlands: a complex interaction. Proc. of the First Eisenhower Consortium Res. Symposium, September 14-19, 1975, Vail, Colorado. Eisenhower Consortium Bul. 1, 286 pp. 1975.

Goals of the consortium: (1) increase understanding of the interactions between people and the environment; and (2) develop methods to provide for the wants of increasing populations while enhancing the attractive features of the environment.

A5a GOODALL, B. The recreational potential of Forestry Commission holdings. In Rep. on Forest Res., Forestry Commission, U.K. Pp. 73-76. 1974.

Construction and use of an index of forest recreation potential, by which the character of any U.K. forest can be measured.

A5a LUCAS, ROBERT C. Low compliance rates at unmanned trail registers. USDA Forest Serv. Intermountain Forest and Range Exp. Sta. Res. Note INT-200, 6 pp. Aug 1975.

Low compliance rates at voluntary trail registration stations mean some use-estimates based on trail registers may be unreliable.

A5a MEHORA, M. Instructions on the cultural and recreational organization of forest areas. In Slovenian; German sum. Gozdarski Vestnik 33(5): 261-274. 1975.

Cultural and recreational importance of forests in Slovenia.

A5a NICOLSON, J. A., and A. C. MACE, JR. Water quality perception by users: can it supplement objective water quality measures? Water Resources Bul. 11(6): 1197-1207. Dec 1975.

III APPLIED TO FOREST PRODUCTION

Establishment of relationships between water quality and the perception of the recreationist will help the manager evaluate water-related outdoor recreation.

A5a NIKOLAENKO, V. T., and N. I. BUKIN. Recreation forestry in France. In Russian. Lesnoe Khoziaistvo 4: 36-38. Apr 1975.

A5a POLZIN, PAUL E., and DENNIS L. SCHWEITZER. Economic importance of tourism in Montana. USDA Forest Serv. Intermountain Forest and Range Exp. Sta. Res. Pap. INT-171, 19 pp. 1975.

About one fourth of each tourist dollar accrues to Montanans as income; the proportion is smaller for expenditures by outdoor recreationists. It is unlikely that growth in tourism could offset income losses resulting from even moderate declines in timber harvesting.

A5a TYRE, GARY L. Average costs of recreation on national forests in the south. Jour. of Leisure Res. 7(2): 114-120. 1975.

Operation, maintenance, construction, overhead, and opportunity cost data were gathered for almost all kinds of site and area managed for recreation by the Forest Service in the South, and costs per visitor-day were computed. Costs vary considerably, but many recreation enterprises prove more expensive than expected.

A5a ULECK, RONALD B. Guidelines for preparing a master plan for a public resource-based outdoor recreation area. Dissertation, Ph.D. State Univ. of New York, Syracuse. 177 pp. 1975.

Objectives: (1) to develop guides for planning a public resource-based outdoor recreation area, (2) to make the scope of the guides broad enough to apply to a wide variety of natural resource bases and planning problems, and (3) to design the guidelines to be useful to planners.

A5c BURANAREK, SINCHAI. National parks and recreation in the wilderness. In Thai. The Vanasarn 33(4): 341-346. Oct/Dec 1975.

A5d FRID, ROSS. The visual management system: protecting aesthetics in forest management. Western Wildlands 2(2): 21-26. Spring 1975.

A6 POTTER, BARRETT G. The "dirty thirties" shelterbelt project. American Forests 82(1): 36-39. Jan 1976.

Advocates reinstitution and expansion of Roosevelt's program, through the use of a revived Civilian Conservation program, in the midst of public pressure to remove the trees planted in the Shelterbelt Project.

III APPLIED TO FOREST PRODUCTION

A6 SHENG, T. C., H. R. STENNETT, and R. A. DE ROSAYRO. Forestry development and watershed management in the upland regions, Jamaica. Food and Agriculture Organization of the United Nations, Forestry Dept., Rome. 249 pp. 1975.

A6 USDA FOREST SERVICE. Municipal watershed management symposium proceedings. USDA Forest Serv. Northeastern Forest Exp. Sta. Gen. Tech. Rep. NE-13, 196 pp. 1975.

A report on the symposium held in September 1973 at Pennsylvania State University and University of New Hampshire, containing 24 papers presented at the meetings.

A7 LACKEY, ROBERT T. Recreational fisheries management and ecosystem modeling. Paper presented to the symposium on Comparison of Biological Predation and Fisheries Exploitation, sponsored by the Aquatic Ecology Section of the Ecological Soc. of America and the American Fisheries Soc., 26th Annual American Institute of Biological Sciences Meeting of Biological Soc., Corvallis, Oregon, August 17-22, 1975. 44 pp. 1975.

Discussion of models and modeling related primarily to fresh-water sport-fisheries management. The theme is that such management involves (1) aquatic fauna and flora, (2) their habitat, and (3) man. The third element, widely neglected by scientists, calls for emphasis.

A8 ANDRESEN, JOHN W., and BARTON M. WILLIAMS. Urban forestry education in North America. Jour. of Forestry 73(12): 786-790. Dec 1975.

Urban forestry educational programs, including a list of North American forestry schools offering urban forestry and related instruction at the university undergraduate or graduate level.

A8 FRENCH, J. R. J. The concept of urban forestry. Australian Forestry 38(3): 177-182. Dec 1975.

Expanding urbanization places great physical, social, economic, and biological pressures on the forest resource. A conceptual proposal for creating and managing an urban forest.

A8 JONES, A. R. C., J. D. MAC ARTHUR, and E. R. THOMPSON. An urban forest concept. Milieu Number 12. 48 pp. Jan-Mar 1976.

Urban forests are those that are located in or near population centers and are intensively managed, not only for wood and other forest products, but also for a variety of recreation and aesthetic services. Common in Europe, scarce in America, such forests hold sufficient promise in Canada so as to justify the necessary planning, research, and problem solving. The proposed Montreal airport buffer forest serves as an example.

III APPLIED TO FOREST PRODUCTION

B1 FLORENCE, R. G., and K. R. SHEPHERD. The role of the eucalypt forests in wood production. Australian Forestry 38(2): 100-116. Sep 1975.

Past land use and development and current demands for forest products. Several categories of management regimes are recognized, and yield under each estimated. Future role of the forest is seen to change substantially.

B1 GANGULI, BARINDRA N. An enquiry into production forestry development in India. Dissertation, Ph.D. Univ. of Michigan. 303 pp. 1975.

Traces the development of timber management in India from the advent of British occupation, with particular emphasis on the post-independence period.

B1 KILKKI, P., and R. POKALA. A long-term timber production model and its application to a large forest area. Acta Forestalia Fennica No. 143, 46 pp. 1975.

B1 LAMBERT, HERB. Wood fiber--big in the economy today, bigger in coming decades. Forest Industries 103(1): 30-37. Jan 1976.

Comprehensive overview of timber supply and the economic factors that will affect industry.

B1 LEAK, WILLIAM B., and STANLEY M. FILIP. Uneven-aged management of northern hardwoods in New England. USDA Forest Serv. Northeastern Forest Exp. Sta. Res. Pap. NE-322, 15 pp. 1975.

Three main aspects of uneven-aged management in northern hardwoods: (1) choice of cutting method, (2) control of yields, (3) transportation or removal of products.

B1 PALMER, J. R. Towards more reasonable objectives in tropical high-forest management for timber production. Commonwealth Forestry Rev. Vol. 54(3) and (4), Nos. 161 and 162: 273-289. Sep/Dec 1975.

Regional forest officers in tropical high-forest areas can be of great assistance to forest-based industries. Fields for collaboration between the forest service and the forest-based industries include forest inventory, timber testing, assistance with costings, development of low-cost housing schemes, machinery selection, and training programs.

III APPLIED TO FOREST PRODUCTION

B1 RICH, STUART (ED.). Ecology, environmentalism, and future timber supply. Proc. of a Current Issues Conference, Univ. of Oregon, Eugene. 108 pp. 1975.

Papers included have to do with: What the forest and rangeland renewable resources planning act means to the timber industry (Session I); Political realities of land-use planning (Session II); Conflicting recreational demands on national forest roadless areas (Session III); and Oregon's future timber supply, public and private (Session IV).

B1 WHEELER. PHILIP R. How much timber can the southern forests produce? Forest Farmer 35(4): 10-11, 14, 18. Feb 1976.

South's timber-growing capacity and development needs.

B3 BEATTIE, WILLIAM D. An economic analysis of the Brazilian fiscal incentives for reforestation. Dissertation, Ph.D. Purdue Univ. 321 pp. 1975.

In order to stimulate growth and development of key sectors of the economy, the Brazilian government has a system of fiscal incentives for reforesting the heavily cut-over lands of south and southeastern Brazil. The monetary benefits and costs of the forestry incentives are here analyzed.

B3 HOLTAM, B. W. Forest practice in Britain is applied terrestial ecology. Arboricultural Jour. 2(8): 297-301. 1975.

Effects of deforestation in Britain; work of the U.K. Forestry Commission to restore the forests and build a reserve of growing trees. Establishment of the forests has allowed forestry skills to redevelop and the wildlife resource to increase.

B4 KROTH, W. Some economic aspects of thinning. New Zealand Forest Serv., Wellington. 11 pp. 1975.

Analysis of the thinning regimes for spruce, using current prices and costs (a) without considering interest and (b) assuming an interest rate of 3 percent.

B4 PORTERFIELD, RICHARD L., and DENNIS L. SCHWEITZER. A quick and data-poor approach to evaluating pre-commercial thinning. Jour. of Forestry 73(12): 771-773. Dec 1975.

Financial break-even guidelines are combined with low-precision growth estimates to give a quick and inexpensive means for identifying precommercial thinning opportunities in lodgepole pine.

III APPLIED TO FOREST PRODUCTION

B5 BELL, ENOCH, ROGER FIGHT, and ROBERT RANDALL. ACE--the two-edged sword. Jour. of Forestry 73(10): 642-643. Oct 1975.

Use of the harvest scheduling's allowable cut effect (ACE) can result in shifting priorities from inventory-protecting to growth-stimulating investments as compared with traditional investment analysis.

D1 BERTRAND, ALVIN L., and ANDREW W. BAIRD. Incendiarism in southern forests: a decade of sociological research. Dept. of Sociology and Rural Life, Mississippi Agricultural and Forestry Exp. Sta., and Social Science Res. Center, Mississippi State Univ., in cooperation with South. Forest Exp. Sta., USDA Forest Serv., Bul. 838, 40 pp. Aug 1975.

Characteristics of the residents of areas where fire occurrence is high. Motivation and identity of the incendiarist. Dissemination of fire-prevention messages. Problems in the social control of incendiarism, which appears to be "more a matter of culture than of socio-demographic characteristics." Louisiana and Mississippi.

E ALSTON, RICHARD M., and DAVID M. FREEMAN. The natural resources decision-maker as political and economic man: toward a synthesis. Jour. of Environmental Management No. 3, pp. 167-183. 1975.

Examines two sets of decisionmaking rules for planning--the financial benefit-cost analysis, and the sociological approach--and points the way toward a useful integration of the two.

E FLICK, WARREN A. Resource flows and values. USDI, Bureau of Land Management Tech. Note 276, 35 pp. Sep 1975.

Application of Leontief input-output analysis to the working of a firm, in which the sectors are the firm's enterprises. The model's price equations serve to identify values implicit in the firm's decisions and to test for consistency between areas or time periods. BLM's Eugene (Oregon) District as a case in point.

E GREGERSEN, H. M. Use of the method of sectoral accounting in forestry sector planning. In Spanish. Food and Agriculture Organization of the United Nations, Forestry Dept. 71 pp. Feb 1975.

E LANDOWNING IN SCOTLAND. Survey on curtailed investment in agriculture and forestry. Landowning in Scotland No. 159, pp. 52-55. 1975.

III APPLIED TO FOREST PRODUCTION

E MAYER, G. Cost of protective and recreation functions of forests. In German. Holz-Zentralblatt 101(43): 575-576. 1975.

Results of a study in Baden-Wurttemberg analyzing the extra costs and losses attributable to location.

E PHILIP, M. S. Planning forestry on private estates in Scotland. Scottish Forestry 29(2): 120-128. 1975.

A computer-based system designed to assist the managers of private forest estates.

E RUSTAGI, KRISHNA P. Forest management planning for timber production: a goal programming approach. Yale Univ. School of Forestry and Environmental Studies Bul. No. 89, 80 pp. 1976.

A goal-programming procedure, illustrated by a hypothetical example, for planning timber regeneration and harvests so as to approach simultaneous maximum output and revenue from harvests and from regeneration investment and minimum regeneration cost.

E SCHULER, ALBERT T. Multiple-use resource management on national forests via goal programming. Dissertation, Ph.D. Iowa State Univ. 230 pp. 1975.

The goal-programming model, a variant of linear programming, was selected as a decision model for possible use by resource managers, which will enable them to integrate available information in multi-criteria decision-making problems.

IV APPLIED TO MANUFACTURING

A1a FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, Forest Industries and Trade Division. Country tables of production, trade and consumption of forest products, north, central and south America. In English, Spanish, and French. 113 pp. 1975.

Production and trade statistics for industrial wood, including roundwood, sawnwood, particleboard, plywood, veneer, pulp and paper, and paperboard, by country.

A1a FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, Forest Industries and Trade Division. Regional tables of production, trade and consumption of forest products, world economic classes and regions, 1960-73. In English, Spanish, and French. 83 pp. 1975.

Production and trade statistics for industrial wood, including roundwood, sawnwood, particleboard, plywood, veneer, pulp and paper, and paperboard, by economic class and region.

A1b BERTELSON, DANIEL F. East Texas forest industries, 1974. USDA Forest Serv. South. Forest Exp. Sta. Resource Bul. SO-57, 20 pp. 1975.

East Texas forests supplied more than 456 million cubic feet of roundwood to forest industries in 1974. Pulpwood and sawlogs were the major products, accounting for 83 percent of the harvest. A total of 202 primary wood-using plants were in operation in 1974.

A1b CALLAHAN, JOHN C. Indiana forest products--the two-billion-dollar industry. Purdue Univ. Agric. Exp. Sta. Res. Bul. No. 923, 15 pp. Jun 1975.

Timber resources, primary wood-using firms, secondary firms, comparisons with other states and with nonforest industries. Output, value added, employment, income, productivity.

A1b RUDERMAN, FLORENCE K. Production, prices, employment, and trade in northwest forest industries, third quarter 1975. USDA Forest Serv. Pacific Northwest Forest and Range Exp. Sta. 57 pp. 1975.

Lumber and plywood production and prices; employment in forest products industries; international trade in logs, pulpwood, chips, lumber and plywood; volume and average prices of stumpage sold by public agencies; and related items--for Alaska, Washington, Oregon, California, Montana, Idaho, and British Columbia.

A1b SIMMONS, FRED C. Forest industry opportunities and problems in the Northeast. North. Logger and Timber Processor 24(7): 8-9, 26-27, 29. Jan 1976.

IV APPLIED TO MANUFACTURING

Current forest industry opportunities and problems; suggestions for federal action.

A1b TESKEY, A. G., and J. H. SMYTH. The economic importance of sawmilling and other primary wood-using industries in Alberta, 1972. In English; French sum . North. Forest Res. Centre, Canadian Forestry Serv. Information Rep. NOR-X-145, 206 pp. Nov 1975.

The industries, the timber resource, the output of products, and the economic impacts.

A1b TESKEY, A. G., and J. H. SMYTH. Employment, income, products, and costs in Manitoba's primary wood-using industry, 1972. In English; French sum. North. Forest Res. Centre, Canadian Forestry Serv. Information Rep. NOR-X-138, 120 pp. Nov 1975.

A1b TESKEY, A. G., and J. H. SMYTH. Saskatchewan's forest industry and its economic importance. In English; French sum. North. Forest Res. Centre, Canadian Forestry Serv. Information Rep. NOR-X-140, 156 pp. Nov 1975.

Indicators used to assess the impact of Saskatchewan's forest industry upon the provincial economy include employment, salaries, wages, sales, output, and value added.

A1c FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, Forest Industries and Trade Division. Country tables of production, trade and consumption of forest products, Europe and USSR, 1960-73. In English, Spanish, and French. 136 pp. 1975.

Production and trade statistics for industrial wood, including roundwood, sawnwood, particleboard, plywood, veneer, pulp and paper, and paperboard, by country.

A1e CHANDRA, R. Report on production and cost of logging and transport of bamboo. Food and Agriculture Organization of the United Nations, Rome. 82 pp. 1975.

Output of bamboo and costs of forest operations, logging, and transport. Forestry labor force; conditions affecting labor productivity.

A1e FATTAH, A. Problems of forestry industrial development planning in Aceh. In Indonesian. Kehutanan Indonesia 2: 609-614. Feb 1975.

A4 OTTERBACH, P. J. Wood procurement decision guides. 23rd Annual Forestry Symposium, Louisiana State Univ., Division of Continuing Education, Proc. Pp. 93-109. 1974.

Computer-assisted financial analysis.

IV APPLIED TO MANUFACTURING

B2 BARGER, R. L. Toward more complete utilization. Western Wildlands 2(2): 16-20. Spring 1975.

Two challenges must be met in order to harvest efficiently and without causing unacceptable environmental damage: (1) improve the recovery and utilization of the total wood resource; (2) reduce the adverse environmental impacts of timber harvesting.

B2 GIBSON, DAVID F. Improved system productivity and resource utilization through computerized planning. In AIIE 1975 Spring Annual Conference Proc., 6 pp 1975.

A system for planning and analyzing a timber harvesting operation in recognition of shortages of natural resources and energy, compounded by environmental considerations. Two alternatives for attacking these problems are (1) improving the productivity of the systems which recover resources, and (2) improving the utilization of the resources themselves.

B2 NEWNHAM, R. M. The fortran program for logplan--a model for planning logging operations. In English; French sum. Forest Management Institute, Dept. of the Environment, Canadian Forestry Serv. Information Rep. FMR-X-78, 77 pp. Jun 1975.

A listing and a detailed description of the program, written in FORTRAN IV, for LOGPLAN, together with an example of the input data and printed output. Examples of core-storage requirements and job execution times.

B2 NEWNHAM, R. M. Logplan--a model for planning logging operations. In English; French sum. Forest Management Institute, Dept. of the Environment, Canadian Forestry Serv. Information Rep. FMR-X-77, 59 pp. Jun 1975.

The model has been developed to help the supervisor construct and evaluate one-year logging plans. The object of the model is to obtain a plan that will meet mill demands throughout the year at a minimum cost while satisfying constraints on available wood and machines.

B3a NEILSON, R. W. Poplar utilization: a problem analysis. In English; French sum. Western Forest Products Laboratory, Forestry Directorate, Environment Canada Information Rep. VP-X-149, 65 pp. Oct 1975.

Poplar represents approximately one-half of the available hardwood resource in Canada, but only a small proportion of it is commercially utilized. This investigation attempts to determine the causes of this low level of use and identify areas where further research can lead to greater utilization.

IV APPLIED TO MANUFACTURING

B3a WALBRIDGE, T. A., and W. B. STUART. Constraints on the utilization of our forest resources in the South. Jour. of Forestry 74(3): 157-159. Mar 1976.

Timber utilization has two sides: (1) utilization of the site to grow wood; (2) utilization of the wood in each tree at harvest time. The major constraint on each side of the utilization problem is economic, but is most often manifested as engineering or human relations.

B3b MATTSON, JAMES A., and EUGENE M. CARPENTER. Logging residue in a northern hardwood timber sale. North. Logger and Timber Processor 24(7): 16-17, 29. Jan 1976.

Salvage of logging residue now left in the woods will require innovations in forest management and logging practice and also coordination between the forester and the logger.

B3b MEYER, VERNON W. A program for improving volume and value recovery in logging operations. North. Logger and Timber Processor 24(9): 6-7. Mar 1976.

Review of the Forest Products Utilization Program, conducted jointly by the Forest Service and state forestry organizations, whose object is to extend timber resources.

B4 CHIMITS, P. Exploitation of the Pyrenees forests for masting in the 18th century, and river transport by rafting in the 20th century. In French. Revue Forestiere Francaise 27(1): 61-68. Jan/Feb 1975.

B4 DYKSTRA, DENNIS P. Production rates and costs for cable, balloon, and helicopter yarding systems in old-growth Douglas-fir. Forest Res. Laboratory, School of Forestry, Oregon State Univ. Res. Bul. 18, 57 pp. Sep 1975.

Initial results of a yarding time study in the Pansy Basin, a cooperative research project designed to test the performance of skylines, balloons, and helicopters operating under various conditions of timber and terrain, and over a range of silvicultural and landscape design prescriptions.

C1a KAFKA, E. Forecasts of the development of the sawmilling industry in Bohemia/Moravia. In Czech; Russian, German, and English summaries. Drevo 29(9): 262-268. 1974.

A study of alternative forecasting models.

C1a MIHALYI, LOUIS J. Zambian timber output is growing. In English; French, German, and Spanish summaries. World Wood 17(2): 11-13, 27. Feb 1976.

IV APPLIED TO MANUFACTURING

Consumption of lumber in Zambia has been growing steadily with output from the copper mines, a large lumber user. Zambian forests are meeting over half of demands; imports provide the balance.

C1a MITCHELL, ADAIR, and PAUL KOENIG. Lumber and wood products: 1975 review and outlook for 1976. Pulp, Pap., and Board 31(4): 26-29. Jan 1976.

Housing slump hurt lumber and plywood industry in 1975. A better year is anticipated for 1976. The industry is striving to profit from its position as one of the lowest energy users and pollution producers.

C1a ROBINSON, VERNON L. An estimate of technological progress in the lumber and wood-products industry. Forest Science 22(2): 149-154. 1975.

Rate of technological progress in the lumber and wood-products industry is estimated by a method introduced by Solow in 1957. An aggregate production function is specified, with value-added as the measure of output, man-years as the labor input, and the book value of fixed and working capital as the other input. Technological progress is measured by the residual change in output after the influence of the labor and capital inputs is accounted for.

C1a TIMBER BULLETIN FOR EUROPE. Medium-term survey of trends in the sawnwood and sawlog sector. Timber Bul. for Europe 27, Supplement 3, 53 pp. 1974.

Output trends in Europe, North America, the USSR, and Japan. Trade patterns, principally for the period 1964-72, for lumber, logs, and railway ties.

C2a BHARGAVA, R. L. Pulp and paper industries development program, Phase 1. In English, French, and Spanish. Food and Agriculture Organization of the United Nations, Forestry Dept., Rome. 41 pp. Oct 1974.

World trends in production and consumption of pulp, paper, and paperboard; world raw material resources; role of developing countries in the international market; proposed long-term strategy.

C2a BUTTS, DONALD W., and LEONARD S. SMITH. Pulp, paper, board, and converted products: 1975 review and outlook for 1976. Pulp, Pap., andBoard 31(4): 5-12. Jan 1976.

Output, income, and employment, down in 1975, are foreseen to turn up sharply in 1976. As the largest user of fuel oil and third largest user of water, the industry expects to be increasingly involved in energy and environmental regulation.

IV APPLIED TO MANUFACTURING

C2a KING, K. F. S. It's time to make paper in the tropics. Unasylva 27(109): 2-5. 1975.

Fifty-five percent of the world's stocked forests are in developing countries, but only four percent of the world's pulp originates there. It is time for the pulp and paper investors from industrial nations and the governments of developing nations to accommodate each other's interests and build more paper mills in these forest-rich nations.

C2a SAWHNEY, R. S. Newsprint manufacture in India--the way ahead. Pulp and Pap. Mag. of Canada 77(1): 41-46. Jan 1976.

Facilities are being expanded and new projects are planned as the country strives to satisfy its newsprint demand by building up the industry on the basis of fast-growing tree species.

C2b DE JESUS, SIMEON. How to make paper in the tropics. Unasylva 27(109): 6-10. 1975.

Practical aspects and problems in establishing pulp and paper plants in developing nations of the tropics. These plants may be costly and complex, but will be profitable to the investor.

C2b SIKES, JOHN E. G. A clean piece of paper. Unasylva 27(109): 11-16. 1975.

Developments of the past decade in pollution control for pulp and paper mills, including legislation. Encouraging trends for the future.

C2c ADAMS, DARIUS M. A model of pulpwood production and trade in Wisconsin and the lake states. Forest Science 21(3): 301-312. Sep 1975.

An econometric model that considers pulpwood consumption, harvest, price, inventory, and movement between the subregions (Wisconsin and Michigan-Minnesota).

C2c BERTELSON, DANIEL F. Southern pulpwood production, 1974. USDA Forest Serv. South. Forest Exp. Sta. Resource Bul. SO-54, 24 pp. 1975.

Southern pulpwood production in 1974 reached a record high with a 4-percent increase over the previous year.

C2c BLYTH, JAMES E., and JERCLD T. HAHN. Pulpwood production in the Lake States by county, 1974. USDA Forest Serv. North Central Forest Exp. Sta. Res. Note NC-193, 4 pp. 1975.

IV APPLIED TO MANUFACTURING

C3a FOREST INDUSTRIES. Annual wood-based panel review. Forest Industries 103(3): 38-52, 124-135. Mar 1976.

Includes the following articles: State of the wood-based panel industry (H. Lambert); Non-housing markets help softwood plywood (American Plywood Association); Hardwood plywood bottomed out in '75 (C. E. McDonald); Domestic market picked up slack for British Columbia (C. L. Shaw); Particleboard goes after new markets (R. E. Dougherty); Green veneer producers' concern--timber supply (Independent Veneer Producers); and a Directory of Panel Plants, U.S. and Canada.

C3a IRLAND, LLOYD C. Outlook for softwood plywood to 1980. Forest Products Jour. 25(11): 16-20. Nov 1975.

Though softwood plywood supply for 1980 is fairly easy to predict, the demand situation is uncertain and will be affected by housing construction, a shift to multiunit structures, and strong competition from particleboard and a variety of new composite panel products.

C3a JAUDON, J. L. South-east Asia, third large source of plywood. In French. Revue du Bois et de ses Applications 29(8/9): 32-41. 1974.

A general review, based largely on a study tour of Malaysia, Singapore, and the Philippines in 1974.

C9 WILSON, J. B. Outlook for particleboard to 1980. Forest Products Jour. 25(11): 10-16. Nov 1975.

Major trends include growth at a decreased annual rate to 1980, plant expansion to meet increased demand, an increase in the price index for particleboard, and increased use of logging residues as board prices increase.

V APPLIED TO MARKETING, TRADE, DEMAND FOR FOREST OUTPUT

A1 PHELPS, ROBERT B. The demand and price situation for forest products. USDA Forest Serv. Misc. Publ. 1315, 85 pp. Sep 1975.

Trends in production, trade, consumption, and prices of forest products in the United States.

A2 BONCHEV, D., and P. KOSTOV. The main points in optimizing wood consumption. In Bulgarian; Russian and English summaries. Gorskostopanska Nauka 12(1): 40-48. 1975.

A model for minimizing the difference between the total wood requirements of the national economy for a given period of time and the actual supplies of wood and wood substitutes, by category.

B1a BENE, J. Impact of Third World forest industries on international forest products markets. World Wood 16(12): 26-27.

Primary effect of developing the Third World's potential wood industry will be to help fill new demands, not to increase market competition with traditional wood producers.

B1a MC MAHON, ROBERT O. Forest products marketing research at Oregon State University. Forest Products Jour. 26(3): 19-22. Mar 1976.

Research focuses on current problems in both international and domestic marketing affecting Oregon's forest products industry.

B1b KINGSLIEN, HAL K. Hedging strategies in the lumber futures market. Forest Products Jour. 25(12): 16-18. Dec 1975.

The essential element in lumber hedging is evaluation of the contract-noncontract basis and the cash-futures basis to determine whether hedging will improve profits without undue risks.

B1b OLMEDO, JAMES P., JR. Commodity hedging in lumber and plywood--does it work? Forest Products Jour. 25(12): 13-16. Dec 1975.

Hedging in lumber and plywood requires a detailed plan complete with a sophisticated analysis of the cash and futures markets. A company can develop a sound hedge plan by identifying price risks, determining what and how much can be hedged, and developing a hedge price strategy.

B2 TOWLER, R. W. U.K. imports of tropical hardwood. (1) Analysis of past, present and future patterns; (2) Pre-sale processing of sawnwood and logs. Timber Trades Jour. 292(5133): 33-36; 293(5144): 33-36. 1974; 1975.

V APPLIED TO MARKETING, TRADE, DEMAND FOR FOREST OUTPUT

The first part reports a study begun in 1971 based on a method of data collection termed "cargo analysis," in which selected cargoes of tropical hardwood were traced through the trade between October 1971 and September 1972. Results are tabulated and discussed. The second part tabulates the results of analyses of pre-sale processing and end-use consumption of sawnwood and logs.

B3 SUNDERLAND, LAWRENCE B. Tariff preferences for developing countries affect forest products. Forest Industries 103(2): 32. Feb 1976.

Duty-free preferential treatment of many forest products, notably plywood and other manufactured wood products, help developing countries.

B3 UNITED STATES DEPARTMENT OF COMMERCE. U.S. lumber exports 1967-74. U.S. Dept. of Commerce, Domestic and International Business Administration. 28 pp. Feb 1976.

Boards and dimension, dimension stock, flooring, cut stock, railway ties, and box shook, by species, destination, and year.

B3 UNITED STATES INTERNATIONAL TRADE COMMISSION. (1) Birch plywood door skins; report to the President . . . USITC Publ. 743, iv, 31, 98 pp. Oct 1975. (2) Birch three-ply door skins from Japan; information obtained . . . USITC Publ. 753, iii, 102 pp. Jan 1976. (3) Birch three-ply door skins from Japan; determination of injury . . . USITC Publ. 754, 24 pp. Jan 1976.

(1) Investigation under Trade Act of 1974 to find whether imports of birch door skins are injuring domestic industry. Finding negative. (2) Information gathered to find whether prices of imports from Japan violate Antidumping Act of 1921. (3) Trade Commission's report in the affirmative.

B7 MOORE, WILLIAM E. Wood residue energy conversion systems market. Forest Products Jour. 26(3): 23-28. Mar 1976.

Interviews with managers of 79 Oregon and California sawmills to determine their wood-residue production, use, and revenues and to identify market requirements for wood-fired energy systems.

C2 DOBIE, J., and J. B. KASPER. Log values for hemlock and cedar from northwestern British Columbia. In English; French sum. Western Forest Products Laboratory, Canadian Forestry Serv., Dept. of the Environment Information Rep. VP-X-144, 20 pp. Mar 1975.

V APPLIED TO MARKETING, TRADE, DEMAND FOR FOREST OUTPUT

Study of the yields and values of lumber and pulp chips from logs of western hemlock and western red cedar from the Terrace area of northwestern B.C. indicates that general conversion returns diminish as log defects increase.

C3 BELLAMY, THOMAS R. Pulpwood prices in the southeast, 1974. USDA Forest Serv. Southeastern Forest Exp. Sta. Res. Note SE-228, 3 pp. Nov 1975.

The second largest annual increase in southeastern pulpwood prices occurred in 1974; total value reached $734 million.

C3 NAUTIYAL, J. C., and R. L. CHOWDHARY. A suggested basis for pricing campsites: demand estimation in an Ontario park. Jour. of Leisure Res. 7(2): 95-107. 1975.

Camping season at a public park is divided into groups of days (experience types) that exhibit different demands. Consumer surplus and demand for each type is figured by Pearse's method. Based on the results a discriminatory pricing system is suggested so that camping fees will more accurately reflect the marginal benefits of the last campsite on any given day.

C3 WILLIS, C. E., J. J. CANAVAN, and R. S. BOND. Optimal short-run pricing policies for a public campground. Jour. of Leisure Res. 7(2): 108-113. 1975.

Limited supplies of public campground facilities may be allocated on the basis of price or nonprice rationing procedures. The presumption that the demand for campsites is extremely inelastic underlies much of the hesitancy to employ price rationing for allocation. This study argues that where substitutes exist, campsite demand may not be price inelastic. This possibility is investigated for a particular campground in Massachusetts.